



Institut de Physique Théorique



Cosmic inflation

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Bibliography

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1 Outline of the lectures and their references

Lecture 1

1. Introduction to the Standard Model of cosmology: [1] (pdf), Secs. 2.1, 2.3, 2.4.
2. Cosmological problems and their solutions: [2] (pdf), Secs. 1.1, 1.2, 1.3.

Lecture 2

1. For “old inflation”, I recommend to have a look at the original article of Guth [3]
2. For “slow-roll inflation”: [2], Secs. 1.4.
3. For “slow-roll” and more detailed explanations on $m^2\phi^2$ model: [4], Chapters. 5.3, 5.4.

References

- [1] Langlois, David. *Inflation, quantum fluctuations and cosmological perturbations*. Lectures delivered at the Cargese School of Physics and Cosmology, Cargese, France, August 2003. arxiv.org/abs/hep-th/0405053
- [2] Baumann, Daniel. *The Physics of Inflation*. Online PhD Lecture notes. www.damtp.cam.ac.uk/user/db275/Inflation/Lectures.pdf
- [3] Guth, Alan H. *Inflationary universe: A possible solution to the horizon and flatness problems*. *Phys. Rev. D* 23 (1981) 347.
- [4] Mukhanov, Viatcheslav. *Physical Foundations of Cosmology*. Cambridge University Press, 2005.